What is claimed is:

1. A method for producing a structured substrate, comprising the step of:

using a nitride type III-V group compound semiconductor substrate on which a plurality of second regions made of a crystal having a second average dislocation density are regularly arranged in a first region made of a crystal having a first average dislocation density so as to produce the structured substrate, the second average dislocation density being greater than the first average dislocation density,

wherein the structured substrate has a structure that does not pass through any one of the second regions.

2. The method for producing the structured substrate as set forth in claim 1,

wherein the structured substrate has a structure whose position and orientation are designated so that the structure does not pass through any one of the second regions.

3. The method for producing the structured substrate as set forth in claim 1,

wherein the plurality of second regions are periodically arranged.

4. The method for producing the structured substrate as set forth in claim 1,

wherein the structured substrate has a

structure, and

wherein the structure and the plurality of second regions are periodically arranged.

5. The method for producing the structured substrate as set forth in claim 4,

wherein the relation of $w_2 = n \times w_1$ is satisfied where w_1 represents the period the structure of the structured substrate, w_2 represents the period of the plurality of second regions, and n represents any natural number.

6. The method for producing the structured substrate as set forth in claim 4,

wherein the relation of $w_1 = n \times w_2$ is satisfied where w_1 represents the period the structure of the structured substrate, w_2 represents the period of the plurality of second regions, and n represents any natural number.

7. The method for producing the structured substrate as set forth in claim 1,

wherein the structured substrate has a structure that is an active region.

8. The method for producing the structured substrate as set forth in claim 1,

wherein the structured substrate has a structure that is a mask pattern used for epitaxial lateral overgrowth.

9. The method for producing the structured

substrate as set forth in claim 3,

wherein the plurality of second regions are periodically arranged in a hexagonal lattice shape.

10. The method for producing the structured substrate as set forth in claim 3,

wherein the plurality of second regions are periodically arranged in a rectangular lattice shape.

11. The method for producing the structured substrate as set forth in claim 3,

wherein the plurality of second regions are periodically arranged in a square lattice shape.

12. The method for producing the structured substrate as set forth in claim 1,

wherein the interval of the two adjacent second regions is 20 μm or greater.

13. The method for producing the structured substrate as set forth in claim 1,

wherein the interval of the two adjacent second regions is 50 μm or greater.

14. The method for producing the structured substrate as set forth in claim 1,

wherein the interval of the two adjacent second regions is 100 μm or greater.

15. The method for producing the structured substrate as set forth in claim 3,

wherein the arrangement period of the second regions is 20 μm or greater.

16. The method for producing the structured substrate as set forth in claim 3,

wherein the arrangement period of the second regions is 50 μm or greater.

17. The method for producing the structured substrate as set forth in claim 3,

wherein the arrangement period of the second regions is 100 μm or greater.

18. The method for producing the structured substrate as set forth in claim 1,

wherein the second regions pierce the nitride type III-V group compound semiconductor substrate.

19. The method for producing the structured substrate as set forth in claim 1,

wherein the second regions are formed in an irregular polygonal prism shape.

20. The method for producing the structured substrate as set forth in claim 1,

wherein third regions are disposed between the first region and the second regions, the third regions having a third average dislocation density that is greater than the first average dislocation density and lower than the second average dislocation density.

21. The method for producing the structured substrate as set forth in claim 20,

wherein the structure of the structured substrate does not pass through any one of the second

regions and any one of the third regions.

22. The method for producing the structured substrate as set forth in claim 1,

wherein the diameter of each of the second regions is 10 μm or greater and 100 μm or smaller.

23. The method for producing the structured substrate as set forth in claim 1,

wherein the diameter of each of the second regions is 20 μm or greater and 50 μm or smaller.

24. The method for producing the structured substrate as set forth in claim 20,

wherein the diameter of each of the third regions is greater than the diameter of each of the second regions by 20 μm or greater and 200 μm or smaller.

25. The method for producing the structured substrate as set forth in claim 20,

wherein the diameter of each of the third regions is greater than the diameter of each of the second regions by 40 μm or greater and 160 μm or smaller.

26. The method for producing the structured substrate as set forth in claim 20,

wherein the diameter of each of the third regions is greater than the diameter of each of the second regions by 60 μm or greater and 140 μm or smaller.

27. The method for producing the structured substrate as set forth in claim 1,

wherein the average dislocation density of each of the second regions is five times greater than the average dislocation density of the first region.

28. The method for producing the structured substrate as set forth in claim 1,

wherein the average dislocation density of each of the second regions is 1×10^{8} cm^{-2} or greater.

29. The method for producing the structured substrate as set forth in claim 1,

wherein the average dislocation density of the first region is 2×10^{6} cm^{-2} or smaller and the average dislocation density of each of the second regions is 1×10^{8} cm^{-2} or greater.

30. The method for producing the structured substrate as set forth in claim 20,

wherein the average dislocation density of the first region is 2×10^{6} cm^{-2} or smaller, the average dislocation density of each of the second regions is 1×10^{8} cm^{-2} or greater, and the average dislocation density of each of the third regions is 1×10^{8} cm^{-2} or smaller and 2×10^{6} cm^{-2} or greater.

31. The method for producing the structured substrate as set forth in claim 1,

wherein the structured substrate has a structure that is spaced apart from any one of the

second regions by 1 μm or greater.

32. The method for producing the structured substrate as set forth in claim 1,

wherein the structured substrate has a structure that is spaced apart from any one of the second regions by 10 μm or greater.

33. The method for producing the structured substrate as set forth in claim 1,

wherein the structured substrate has a structure that is spaced apart from any one of the second regions by 100 μm or greater.

34. The method for producing the structured substrate as set forth in claim 1,

wherein the structure is formed on a nitride type III-V group compound semiconductor layer grown on the nitride type III-V group compound semiconductor substrate.

35. The method for producing the structured substrate as set forth in claim 1,

wherein the nitride type III-V group compound semiconductor substrate is made of $Al_xB_yGa_{1-x-y-z}In_zAs_uN_{1-u-v}P_v$ (where $0 \leq x \leq 1$, $0 \leq y \leq 1$, $0 \leq z \leq 1$, $0 \leq u \leq 1$, $0 \leq v \leq 1$, $0 \leq x + y + z < 1$, $0 \leq u + v < 1$).

36. The method for producing the structured substrate as set forth in claim 1,

wherein the nitride type III-V group compound semiconductor substrate is made of $Al_xB_yGa_{1-x-y-z}In_zN$

(where $0 \leq x \leq 1$, $0 \leq y \leq 1$, $0 \leq z \leq 1$, $0 \leq x + y + z < 1$).

37. The method for producing the structured substrate as set forth in claim 1,

wherein the nitride type III-V group compound semiconductor substrate is made of $Al_xGa_{1-x-z}In_zN$ (where $0 \leq x \leq 1$, $0 \leq z \leq 1$).

38. The method for producing the structured substrate as set forth in claim 1,

wherein the nitride type III-V group compound semiconductor substrate is made of GaN.

39. The method for producing the structured substrate as set forth in claim 1, further comprising the step of:

forming a plurality of portions that are different from other portions in the interval of the second regions and/or the arrangement thereof as alignment marks so as to align a mask.

40. A structured substrate comprising a nitride type III-V group compound semiconductor substrate on which a plurality of second regions made of a crystal having a second average dislocation density are regularly arranged in a first region made of a crystal having a first average dislocation density, the second average dislocation density being greater than the first average dislocation density,

wherein the structured substrate has a

structure that does not pass through any one of the second regions.

41. The method for producing the structured substrate as set forth in claim 40, further comprising the step of:

forming a plurality of portions that are different from other portions in the interval of the second regions and/or the arrangement thereof as alignment marks so as to align a mask.

42. A method for producing a semiconductor light emitting device, comprising the step of:

using a nitride type III-V group compound semiconductor substrate on which a plurality of second regions made of a crystal having a second average dislocation density are regularly arranged in a first region made of a crystal having a first average dislocation density so as to produce the semiconductor light emitting device, the second average dislocation density being greater than the first average dislocation density,

wherein the semiconductor light emitting device has a light emitting region that does not pass through any one of the second regions.

43. A semiconductor light emitting device comprising a nitride type III-V group compound semiconductor substrate on which a plurality of second regions made of a crystal having a second average

dislocation density are regularly arranged in a first region made of a crystal having a first average dislocation density, the second average dislocation density being greater than the first average dislocation density,

wherein the semiconductor light emitting device has a light emitting region that does not pass through any one of the second regions.

44. A method for producing a semiconductor device, comprising the step of:

using a nitride type III-V group compound semiconductor substrate on which a plurality of second regions made of a crystal having a second average dislocation density are regularly arranged in a first region made of a crystal having a first average dislocation density so as to produce the semiconductor device, the second average dislocation density being greater than the first average dislocation density,

wherein the semiconductor device has an active region that does not pass through any one of the second regions.

45. A semiconductor device comprising a nitride type III-V group compound semiconductor substrate on which a plurality of second regions made of a crystal having a second average dislocation density are regularly arranged in a first region made of a crystal having a first average dislocation density, the second

average dislocation density being greater than the first average dislocation density,

wherein the semiconductor device has an active region that does not pass through any one of the second regions.

46. A method for producing a structured substrate, comprising the step of:

using a nitride type III-V group compound semiconductor substrate on which a plurality of second regions made of a crystal having a second average dislocation density are regularly arranged in a first region made of a crystal having a first average dislocation density so as to produce a structured substrate, the second average dislocation density being greater than the first average dislocation density, the second regions being arranged at a first interval in a first direction and at a second interval in a second direction perpendicular to the first direction, the second interval being smaller than the first interval,

wherein the structured substrate has a structure that does not pass through any one of the second regions.

47. A structured substrate comprising a nitride type III-V group compound semiconductor substrate on which a plurality of second regions made of a crystal having a second average dislocation density are regularly arranged in a first region made of a crystal

having a first average dislocation density, the second average dislocation density being greater than the first average dislocation density, the second regions being arranged at a first interval in a first direction and at a second interval in a second direction perpendicular to the first direction, the second interval being smaller than the first interval,

wherein the structured substrate has a structure that does not pass through any one of the second regions.

48. A method for producing a structured substrate, comprising the step of:

using a nitride type III-V group compound semiconductor substrate on which a plurality of second regions that linearly extend and that are made of a crystal having a second average dislocation density are regularly arranged in parallel in a first region made of a crystal having a first average dislocation density so as to produce a structured substrate, the second average dislocation density being greater than the first average dislocation density,

wherein the structured substrate has a structure that does not pass through any one of the second regions.

49. A structured substrate comprising a nitride type III-V group compound semiconductor substrate on which a plurality of second regions that linearly

extend and that are made of a crystal having a second average dislocation density are regularly arranged in parallel in a first region made of a crystal having a first average dislocation density, the second average dislocation density being greater than the first average dislocation density,

wherein the structured substrate has a structure that does not pass through any one of the second regions.

50. A method for producing a semiconductor light emitting device, comprising the step of:

using a nitride type III-V group compound semiconductor substrate on which a plurality of second regions made of a crystal having a second average dislocation density are regularly arranged in a first region made of a crystal having a first average dislocation density so as to produce a semiconductor light emitting device, the second average dislocation density being greater than the first average dislocation density, the second regions being arranged at a first interval in a first direction and at a second interval in a second direction perpendicular to the first direction, the second interval being smaller than the first interval,

wherein the semiconductor light emitting device has a light emitting region that does not pass through any one of the second regions.

51. A semiconductor light emitting device comprising a nitride type III-V group compound semiconductor substrate on which a plurality of second regions made of a crystal having a second average dislocation density are regularly arranged in a first region made of a crystal having a first average dislocation density, the second average dislocation density being greater than the first average dislocation density, the second regions being arranged at a first interval in a first direction and at a second interval in a second direction perpendicular to the first direction, the second interval being smaller than the first interval,

wherein the semiconductor light emitting device has a light emitting region that does not pass through any one of the second regions.

52. A method for producing a semiconductor light emitting device, comprising the step of:

using a nitride type III-V group compound semiconductor substrate on which a plurality of second regions that linearly extend and that are made of a crystal having a second average dislocation density are regularly arranged in parallel in a first region made of a crystal having a first average dislocation density so as to produce a semiconductor light emitting device, the second average dislocation density being greater than the first average dislocation density,

wherein the semiconductor light emitting device has a light emitting region that does not pass through any one of the second regions.

53. A semiconductor light emitting device comprising a nitride type III-V group compound semiconductor substrate on which a plurality of second regions that linearly extend and that are made of a crystal having a second average dislocation density are regularly arranged in parallel in a first region made of a crystal having a first average dislocation density, the second average dislocation density being greater than the first average dislocation density,

wherein the semiconductor light emitting device has a light emitting region that does not pass through any one of the second regions.

54. A method for producing a semiconductor device, comprising the step of:

using a nitride type III-V group compound semiconductor substrate on which a plurality of second regions made of a crystal having a second average dislocation density are regularly arranged in a first region made of a crystal having a first average dislocation density so as to produce a semiconductor device, the second average dislocation density being greater than the first average dislocation density, the second regions being arranged at a first interval in a first direction and at a second interval in a second

direction perpendicular to the first direction, the second interval being smaller than the first interval,

wherein the semiconductor device has an active region that does not pass through any one of the second regions.

55. A semiconductor device comprising a nitride type III-V group compound semiconductor substrate on which a plurality of second regions made of a crystal having a second average dislocation density are regularly arranged in a first region made of a crystal having a first average dislocation density, the second average dislocation density being greater than the first average dislocation density, the second regions being arranged at a first interval in a first direction and at a second interval in a second direction perpendicular to the first direction, the second interval being smaller than the first interval,

wherein the semiconductor device has an active region that does not pass through any one of the second regions.

56. A method for producing a semiconductor device, comprising the step of:

using a nitride type III-V group compound semiconductor substrate on which a plurality of second regions that linearly extend and that are made of a crystal having a second average dislocation density are regularly arranged in parallel in a first region made

of a crystal having a first average dislocation density so as to produce a semiconductor device, the second average dislocation density being greater than the first average dislocation density,

wherein the semiconductor device has an active region that does not pass through any one of the second regions.

57. A semiconductor device comprising a nitride type III-V group compound semiconductor substrate on which a plurality of second regions that linearly extend and that are made of a crystal having a second average dislocation density are regularly arranged in parallel in a first region made of a crystal having a first average dislocation density, the second average dislocation density being greater than the first average dislocation density,

wherein the semiconductor device has an active region that does not pass through any one of the second regions.